# **GTR 200**

# Pilot's Guide





#### © 2013 Garmin Ltd. or its subsidiaries. All rights reserved.

This manual reflects the operation of System Software version 1.00, or later. Some differences in operation may be observed when Comparing the information in this manual to later software versions.

Garmin International, Inc., 1200 East 151st Street, Olathe, KS 66062, U.S.A.

Fax: 913/397.8282 Tel: 913/397.8200

Garmin AT, Inc., 2345 Turner Road SE, Salem, OR 97302, U.S.A.

Tel: 503/391.3411 Fax 503/364.2138

Garmin (Europe) Ltd., Liberty House, Bulls Copse Road, Hounsdown Business Park, Southampton,

SO40 9RB, U.K.

Tel. +44 (0) 870 850 1243 Fax +44 (0) 238 052 4004

Garmin Corporation, No. 68, Zhangshu 2nd Road, Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

Tel: 886/02.2642.9199 Fax: 886/02 2642 9099

www.garmin.com https://fly.garmin.com/fly-garmin

Except as expressly provided herein, no part of this manual may be reproduced, copied, transmitted, disseminated, downloaded or stored in any storage medium, for any purpose without the express written permission of Garmin. Garmin hereby grants permission to download a single copy of this manual and of any revision to this manual onto a hard drive or other electronic storage medium to be viewed for personal use, provided that such electronic or printed copy of this manual or revision must contain the Complete text of this copyright notice and provided further that any unauthorized Commercial distribution of this manual or any revision hereto is strictly prohibited.

Garmin® is a registered trademarks of Garmin Ltd. or its subsidiaries. These trademarks may not be used without the express permission of Garmin.



#### LIMITED WARRANTY

All Garmin avionics products are warranted to be free from defects in materials or workmanship for: two years from the date of purchase for new Remote-Mount and Panel-Mount products; one year from the date of purchase for new portable products and any purchased newly-overhauled products; six months for newlyoverhauled products exchanged through a Garmin Authorized Service Center; and 90 days for factory repaired or newly-overhauled products exchanged at Garmin in lieu of repair. Within the applicable period, Garmin will, at its sole option, repair or replace any Components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not apply to: (i) cosmetic damage, such as scratches, nicks and dents; (ii) consumable parts, such as batteries, unless product damage has occurred due to a defect in materials or workmanship; (iii) damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes; (iv) damage caused by service performed by anyone who is not an authorized service provider of Garmin; or (v) damage to a product that has been modified or altered without the written permission of Garmin. In addition, Garmin reserves the right to refuse warranty claims against products or services that are obtained and/or used in contravention of the laws of any country.

THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY OR OTHERWISE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

IN NO EVENT SHALL GARMIN BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Garmin retains the exclusive right to repair or replace (with a new or newly-overhauled replacement product) the product or software or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

**Online Auction Purchases**: Products purchased through online auctions are not eligible for warranty coverage. Online auction confirmations are not accepted for warranty verification. To obtain warranty service, an original or copy of the

sales receipt from the original retailer is required. Garmin will not replace missing Components from any package purchased through an online auction.

**International Purchases**: A separate warranty may be provided by international distributors for devices purchased outside the United States depending on the country. If applicable, this warranty is provided by the local in-country distributor and this distributor provides local service for your device. Distributor warranties are only valid in the area of intended distribution. Devices purchased in the United States or Canada must be returned to the Garmin service center in the United Kingdom, the United States, Canada, or Taiwan for service.

To obtain warranty service, contact your local Garmin Authorized Service Center. For assistance in locating a Service Center near you, visit the Garmin web site at http://www.garmin.com or contact Garmin Customer Service at 866-739-5687.



**WARNING:** For safety reasons, GTR 200 operational procedures must be learned on the ground.



**CAUTION**: The Garmin GTR 200 does not contain any user-serviceable parts. Repairs should only be made by an authorized Garmin service center. Unauthorized repairs or modifications could void both the warranty and the pilot's authority to operate this device under FAA/FCC regulations.



**CAUTION**: The GTR 200 display uses a lens coated with a special anti-reflective coating that is very sensitive to skin oils, waxes, and abrasive cleaners. CLEANERS CONTAINING AMMONIA WILL HARM THE ANTI-REFLECTIVE COATING. It is very important to clean the lens using a clean, lint-free cloth and an eyeglass lens cleaner that is specified as safe for anti-reflective coatings.



**NOTE**: All visual depictions contained within this document, including screen images of the GTR 200 bezel and displays, are subject to change and may not reflect the most current GTR 200 software. Depictions of equipment may differ slightly from the actual equipment.



**NOTE**: This device Complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



**NOTE**: This product, its packaging, and its Components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This notice is being provided in accordance with California's Proposition 65. If you have any questions or would like additional information, please refer to our web site at www.garmin.com/prop65.



**NOTE**: Canadian installations: In accordance with Canadian Radio Specifications Standard 102 (RSS 102), an RF safety separation distance of 26 cm from the antenna should be maintained for an RF field strength exposure to persons of less than the 10W/m² occupational safety limit.

NOTE: This device Complies with Part 15 of the FCC limits for Class B digital devices.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio Communications. Furthermore, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference, the user is encouraged to try to correct the interference by relocating the equipment or connecting the equipment to a different circuit than the affected equipment. Consult an authorized dealer or other qualified avionics technician for additional help if these remedies do not correct the problem.

Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

To obtain accessories for your unit, please contact Garmin.

Help us better support you by Completing our on-line registration form today!
Registration ensures that you will be notified of product updates and new products and provides lost or stolen unit tracking. Please, have the serial number of your unit handy, connect to our web site (www.garmin.com) and look for our Product Registration link on the Home page.

The display surface is coated with a special anti-reflective coating which is very sensitive to skin oils, waxes and abrasive cleaners. It is very important to clean the lens using an eyeglass lens cleaner which is specified as safe for anti-reflective coatings and a clean, lint-free cloth.

# PRODUCT REGISTRATION AND SUPPORT

Help us better support you by completing your online registration today! Have the serial number of your product handy and connect to the Garmin web site (www.garmin.com or https://fly.garmin.com/fly-garmin). Look for the Product Registration link on the Home page. Also, be sure to record your serial number in the space provided.

If you have any questions, the Garmin Product Support department may be reached Monday through Friday, 7:00 AM to 7:00 PM Central Time.

US: 913-397-8200

US Toll Free: 1-866-739-5687 Canada Toll Free: 1-866-429-9296

| Record of Revisions |          |         |                 |
|---------------------|----------|---------|-----------------|
| Part Number         | Revision | Date    | Description     |
| 190-01553-01        | А        | 07/2013 | Initial release |

Blank Page

# **TABLE OF CONTENTS**

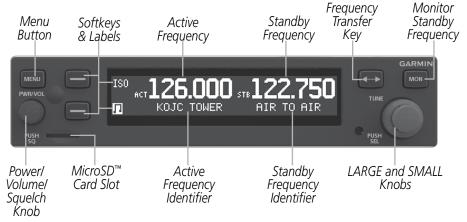
| DESCRIPTION                           | 1   |
|---------------------------------------|-----|
| Display                               | 1   |
| Controls                              |     |
| Softkeys                              |     |
| ·                                     |     |
| BASIC OPERATION                       | 4   |
| Power-UP                              | 4   |
| COM Radio                             | 4   |
| Selecting a COM Frequency:            | 2   |
| Adjusting Volume:                     | 2   |
| Standby COM Frequency Monitoring      | 5   |
| Monitoring the Standby COM Frequency: |     |
| COM Frequency Storage                 |     |
| Saving a COM Frequency:               |     |
| Editing a Saved COM Frequency:        |     |
| Accessing the COM Frequency Groups:   |     |
| Emergency Channel                     |     |
| Quick Tuning the Emergency Channel:   |     |
| Stuck Mic                             | 8   |
|                                       |     |
| MAIN MENU                             |     |
| Accessing/Using the Main Menu:        |     |
| Setup Menu                            |     |
| Accessing/Using the SETUP Menu:       |     |
| 3D Audio                              |     |
| Enabling/Disabling 3D Audio:          |     |
| About Screen                          |     |
| Accessing the ABOUT Menu:             | 12  |
| ICC CONFICURATION                     | 4.5 |
| ICS CONFIGURATION                     |     |
| Setting the ICS Volume:               |     |
| Setting the ICS Squelch:              |     |
| Enable/disable Pilot Isolation:       | 13  |
| APPENDIX                              | 1/  |
| Softkey Configuration                 |     |
| Configuring Softkeys:                 |     |
| Troubleshooting                       |     |
| Maccanac                              |     |

Blank Page



# **DESCRIPTION**

The GTR 200 is a VHF communications transceiver with a built in stereo intercom. The GTR 200 operates in the aviation voice band, from 118.000 to 136.975 MHz, in 25 kHz steps.



GTR 200 Front Panel

#### **DISPLAY**

| Display Item                       | Description   |
|------------------------------------|---|
| Softkey<br>Labels                  | (PILOT PTT ( <b>P</b> π <b>)</b> , MUSIC ON/OFF ( <b>J</b> ), USER LIST ( <b>USR</b> ), Pilot Isolation ( <b>ISO</b> ) or TUNE EMERGENCY ( <b>EMR</b> )). |
| Active<br>Frequency                | Active Frequency (MHz.kHz) proceeded by a ACT annunciation.   |
| Active<br>Frequency<br>Identifier  | Active Frequency Identifier. When applicable, four letter ICAO identifier followed by the Frequency Type.   |
| Standby<br>Frequency               | Standby Frequency (MHz.kHz) proceeded by a STB annunciation.  |
| Standby<br>Frequency<br>Identifier | Standby Frequency Identifier. When applicable, four letter ICAO identifier followed by the Frequency Type.  |



# **CONTROLS**

| Control                                | Description   |
|--|---|
| Menu<br>Button                         | Press to view <b>Menu</b> options on the right side of the screen. (ICS VOL, ICS SQ, <b>J</b> VOL, SETUP, USER FREQ, and ABOUT).  |
|  | The <b>Power/Volume/Squelch</b> knob located in the bottom left corner of the bezel controls audio volume for the COM radio. Rotating the knob clockwise past the detent turns power on and counter-clockwise turns power off. When the COM radio is active, press the <b>Power/Volume/Squelch</b> knob to toggle automatic squelch control On/Off for the COM radio. |
| Power/<br>Volume/<br>Squelch<br>Knob   | The GTR 200 radio receiver features an automatic squelch that rejects many localized noise sources. You may override the squelch function by pressing the <b>Power/Volume/Squelch</b> knob. This facilitates listening to a distant station or setting the desired volume level.  |
|  | To override the radio receiver automatic squelch, press the <b>Power/Volume/Squelch</b> knob momentarily. Press the <b>Power/Volume/Squelch</b> knob again to return to automatic squelch operation. A "SQ" indication appears to the left of the active COM frequency window in the upper left corner of the display when automatic squelch is overridden.           |
| Softkeys                               | User-defined Softkeys, defined in configuration mode. Softkeys are also used for menu navigation.   |
| MicroSD™<br>Card Slot                  | Used for updating unit software.  |
| Frequency<br>Transfer Key              | Press and release the <b>Frequency Transfer Key</b> to switch between the active (left-most) and standby (right-most) frequency. Switching between COM frequencies is disabled while transmitting. Press and hold the <b>Frequency Transfer Key</b> for approximately three seconds to tune the emergency frequency (121.500 MHz).                                    |
| Monitor<br>Standby<br>Frequency<br>Key | The <b>MON</b> (Monitor) key will engage the monitor function where the Standby frequency may be monitored while still listening to the Active frequency.   |



| Control   | Description  |
|-----------|--|
| LARGE and | The LARGE right (MHz) and SMALL right (kHz) knobs are used for         |
| SMALL     | tuning frequencies and data entry. Press the SMALL Knob to select menu |
| Knobs     | items or access the Frequency Menu from the main screen.               |

#### **SOFTKEYS**

The GTR 200 features two User-defined softkeys. Softkeys are defined in Configuration Mode, see the Appendix for information on configuring softkeys. Softkeys can be disabled or assigned to one of the following:

- **PILOT PTT (**PTT) Pilot Push-to-Talk can be used in place of or as a back up to a remote Push-to-Talk switch.
- MUSIC ON/OFF ( ) Turns music input ON/OFF. N/A when Intercom is configured off. Press and hold to toggle COM Mute Music.
- **USER LIST (USE)** Provides quick access to the COM User Frequencies.
- **PILOT ISOLATION** (**ISO**) Isolates the Pilot from ICS Communication and music. N/A when Intercom is configured off.
- **TUNE EMERGENCY (EME)** Quickly tunes and activates the emergency frequency (121.500 MHz).



# **BASIC OPERATION**

#### **POWER-UP**

Turn the GTR 200 on by either turning the **Power/Volume/Squelch** knob clockwise or, if installed, turning on the master switch that powers the radios.

# **COM RADIO**

New frequencies are first selected as a Standby frequency and then toggled to the Active side with the **Frequency Transfer Key**. While viewing the Standby frequency display, use the **LARGE** and **SMALL** knobs on the right side of the GTR 200 to select the desired frequency. Turn the **LARGE** and **SMALL** knobs, clockwise to increase and counterclockwise to decrease frequency values. Standby frequency selections is not inhibited during transmit

When connected to a device that provides nearby frequency information, nearby station identifiers will be shown for the selected frequency.



#### **COM Frequency Selection**

# Selecting a COM Frequency:

- 1) Turn the **LARGE** Knob to change the value in one MHz increments.
- **2)** Turn the **SMALL** Knob to change the value in 25 kHz increments.
- 3) Press the **Frequency Transfer Key** to toggle the Standby frequency to the Active frequency.

#### **Adjusting Volume:**

Turn the **Power/Volume/Squelch** knob clockwise to increase volume and counter-clockwise to decrease volume.



# STANDBY COM FREQUENCY MONITORING

The Frequency Monitoring function allows you to monitor the Standby frequency for activity, while listening to the Active frequency. When the Active frequency receives a signal, the unit will switch automatically to the Active frequency. The Active frequency quality is not affected.

#### Monitoring the Standby COM Frequency:

Press the **MON** Key, to listen to the Standby frequency. A small 'M**>**' is displayed above the 'STB' to the left of the Standby frequency. Press the **MON** Key again to stop monitoring.



**Standby COM Frequency Monitor Annunciation** 

# COM FREQUENCY STORAGE

Any frequency may be saved into the COM User Frequency Group. The COM User Frequency database can hold up to 20 frequencies. Press the **USR** Softkey or Press the **SMALL** Knob to access the frequency groups.

### **Saving a COM Frequency:**

- 1) Press the **SMALL** Knob and turn the **LARGE** Knob to highlight **USER**.
- **Or**: Press the **USR** Softkey if configured.
- **Or:** Press **MENU**, and turn the **LARGE** Knob to highlight **USER FREQ**. Press the **SMALL** Knob to select. Skip to step 3.
- 2) Turn the **SMALL** Knob to move the cursor to highlight **EDIT** and press the **SMALL** Knob to select EDIT.





- 3) Turn the **LARGE** Knob to highlight ADD and press the **SMALL** Knob to select ADD.
- **4)** Turn the **SMALL** Knob to select a character, turn the **LARGE** Knob to move the cursor to the next field.



- **5)** Press the **SMALL** Knob to accept the name entry.
- **6)** Turn the **LARGE** Knob to move the cursor to the FREQ Field.
- **7)** Turn the **SMALL** Knob to tune the desired MHz value.
- **8)** Turn the **LARGE** Knob to move the cursor to the kHz Field.



- **9)** Turn the **SMALL** Knob to tune the desired kHz value.
- **10)** Press the **SMALL** Knob to accept entry.
- **11)** Turn the **LARGE** Knob to highlight SAVE and press the **SMALL** Knob to Save.

#### **Editing a Saved COM Frequency:**

- 1) Press the **SMALL** Knob and turn the **LARGE** Knob to highlight **USER**.
- **Or**: Press the **USR** Softkey if configured.
- **Or:** Press **MENU**, and turn the **LARGE** Knob to highlight **USER FREQ**. Press the **SMALL** Knob to select. Skip to step 3.
- 2) Turn the **SMALL** Knob to move the cursor to highlight **EDIT** and press the **SMALL** Knob to select EDIT.
- **3)** Turn the **LARGE** Knob to highlight EDIT for the desired entry and press the **SMALL** Knob to select.





- **4)** Turn the **SMALL** Knob to begin editing, turn the **LARGE** Knob to move the cursor to the next field.
- **5)** Press the **SMALL** Knob to accept the name entry.
- 6) Turn the **LARGE** Knob to move the cursor to the FREO Field.
- 7) Turn the **SMALL** Knob to tune the desired MHz value.
- 8) Turn the **LARGE** Knob to move the cursor to the kHz Field.
- **9)** Turn the **SMALL** Knob to tune the desired kHz value.
- **10)** Press the **SMALL** Knob to accept entry.
- **11)** Turn the **LARGE** Knob to highlight SAVE or DELETE and press the **SMALL** Knob to save, or delete the entry, or press the CANCEL Softkey to cancel and exit.

#### Accessing the COM Frequency Groups:

- 1) Press the **SMALL** knob from the COM display to access the Frequency Groups.
- 2) Turn the **LARGE** knob to select a Frequency Group option.



- **USER Group** select to view the COM User Frequency group.
- **RECENT Group** select to view a list of the 20 most recently used frequencies.
- **KXXX (Airport Groups)** When connected to a device that supplies position and frequency data, up to 10 flight plan and/or nearby airport frequency groups are automatically received and presented on the GTR 200.



- 3) Turn the **SMALL** Knob to move the cursor to the desired frequency.
- 4) Press the SMALL Knob to tune the highlighted frequency as the Standby frequency. Press the Frequency Transfer Key to tune as the Active Frequency.

#### **EMERGENCY CHANNEL**

The GTR 200 offers quick tuning of the Emergency Channel by holding down the **Frequency Transfer** Key for approximately three seconds.

#### **Quick Tuning the Emergency Channel:**

Press and hold the **Frequency Transfer Key** for approximately three seconds or press the **EMR** Softkey if configured. The Emergency Channel will be inserted into the Active Frequency position and the previous Active Frequency, will become the Standby Frequency.

#### **STUCK MIC**

The GTR 200 helps protect you from a situation where the microphone may get stuck in the ON or Transmit position. If the microphone is keyed for longer than 35 seconds, the GTR 200 will return to the receive mode on the selected frequency.

A "PILOT or COPILOT PTT KEY STUCK" message will be displayed until the transmit key is released. The Alert will be displayed until the MIC is no longer stuck.



During a PILOT PTT KEY STUCK situation if one of the softkeys has been configured as PTT, transmit capability will be available through the PTT softkey after the 35 second time-out.



# **MAIN MENU**

The Menu provides configuration options for the Internal Communications System (ICS VOL, and ICS SQ) (if configured), Music  $\square$  VOL, SETUP, USER FREQ, and ABOUT.

#### Accessing/Using the Main Menu:

Press the **MENU** Key to access the Menu. Use the **LARGE** Knob to navigate the menu and **SMALL** Knob to make a selection or adjust the level. Press **BACK** softkey to return to the previous screen.



Main Menu

#### **SETUP MENU**

The SETUP menu provides configuration options for music muting (COM MUTE **1**), ICS muting (COM ICS MUTE), 3D Audio options (COM 3D AUDIO, and ICS 3D AUDIO), KEY BEEPS and Display CONTRAST level.



**SETUP Menu** 

- **COM MUTE □ (ON/OFF)** When ON, music will be muted when Communication is received. Only available when ICS is configured.
- **COM ICS MUTE (ON/OFF)** When ON, ICS Communication will be muted when Communication is received. Only available when ICS is configured.



- **COM 3D AUDIO (ON/OFF)** When ON, 3D audio is enabled for received transmissions when Standby COM Channel monitoring is active. Only available when ICS is configured.
- ICS 3D AUDIO (ON/OFF) When ON, 3D audio is enabled for ICS Communication. Only available when ICS is configured.
- **KEY BEEPS (ON/OFF)** When ON, Key Beeps will be heard when any key is pressed.
- **CONTRAST** (-10 to +10) Adjusts the display contrast level.

# Accessing/Using the SETUP Menu:

- 1) Press the **MENU** key.
- **2)** Turn the **LARGE** Knob to highlight SETUP and press the **SMALL** Knob.
- **3)** Turn the **LARGE** Knob to navigate. Turn or Press the **SMALL** Knob to change a selection.
- **4)** Press the **BACK** Softkey to return to the Main Menu.

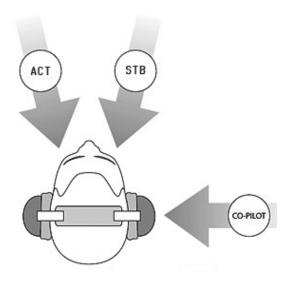
#### **3D AUDIO**

3D Audio is useful when multiple audio sources are present. By using different responses in each ear, 3D audio processing creates the illusion that each audio source is coming from a unique location or seat position.

Because this feature uses different signals for left and right channels, it requires wiring for stereo intercom and stereo headsets. If 3D audio is activated when mono headsets are in use, the listener will still hear all audio sources; however, there is no benefit from location separation.

During normal operation and with 3D Audio enabled, the listener hears the Active Frequency at the 12 o'clock position. If the Standby is selected for monitoring, the listener hears the Active at 11 o'clock and the Standby at the 1 o'clock position. Intercom positions are processed to sound like their relative seat location. By default, the GTR 200 assumes the pilot sits in the left seat. Pilot seat location can be changed in configuration mode, see the GTR 200 Installation Manual for details





3D Audio

# **Enabling/Disabling 3D Audio:**

- 1) Press the **MENU** key.
- 2) Turn the LARGE Knob to highlight SETUP and press the SMALL Knob.
- 3) Turn the LARGE Knob to navigate to COM 3D AUDIO or ICS 3D AUDIO. Turn the SMALL Knob to toggle ON/OFF.
- 4) Press the **BACK** Softkey to return to the Main Menu.

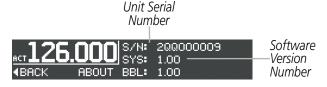


# **ABOUT SCREEN**

The ABOUT screen shows the unit Serial Number, and System Software version number.

# **Accessing the ABOUT Menu:**

- 1) Press the **MENU** key.
- 2) Turn the **LARGE** Knob to highlight ABOUT and press the **SMALL** Knob.
- 3) Press the **BACK** Softkey to return to the Main Menu.



**ABOUT Menu** 



# ICS CONFIGURATION

The GTR 200 features a stereo integrated Intercom System (ICS). The GTR 200 may also be installed and configured for Keyed ICS operations. Keyed ICS is typically used in an extremely noisy environments, such as an open cockpit. The ICS is enabled or disabled in Configuration Mode. See the GTR 200 Installation Manual for installation and configuration details.

# **Setting the ICS Volume:**

- 1) Press the **MENU** key.
- 2) Turn the LARGE Knob to highlight the ICS VOL field.
- **3)** Turn the **SMALL** Knob clockwise to increase, or counter clockwise to decrease volume.



#### **Setting the ICS Squelch:**

- 1) Press the **MENU** key.
- 2) Turn the **LARGE** Knob to highlight the **ICS SQ** field.
- **3)** Turn the **SMALL** Knob clockwise to increase, or counter clockwise to decrease squelch. Turn the SMALL Knob one click counter clockwise past 0% to enable ICS auto squelch.



**NOTE**: When Squelch is set to 0%, squelch is always open and when set to 100% squelch is always closed.

#### **Enable/disable Pilot Isolation:**

Press the Pilot Isolation **ISO** Softkey if configured. Pilot Isolation mode is only available when the Pilot Isolation Softkey is configured.



# **APPENDIX**

#### **SOFTKEY CONFIGURATION**

The GTR 200 features two User-defined softkeys. Softkeys are defined in Configuration Mode, see below for configuring softkeys. Softkeys can be disabled or assigned to one of the following:

- **PILOT PTT** (**PTT**) Pilot Push-to-Talk can be used in place of or as a back up to a remote Push-to-Talk switch.
- MUSIC ON/OFF ( ) Turns music input ON/OFF. N/A when Intercom is configured off. Press and hold to toggle COM Mute Music.
- **USER LIST (USE)** Provides quick access to the COM User Frequencies.
- **PILOT ISOLATION** (**ISO**) Isolates the Pilot from ICS Communication. N/A when Intercom is configured off.
- **TUNE EMERGENCY (EMR)** Quickly tunes and activates the emergency frequency (121.500 MHz).

# **Configuring Softkeys:**

- Press and hold the SMALL Knob while applying power to the unit, by either turning the Power/Volume/Squelch knob clockwise or, if installed, turning on the avionics master switch.
- Turn the LARGE Knob to highlight SOFTKEY SETUP and press the SMALL Knob to select.
- 3) Turn the **LARGE** Knob to toggle between the Key 1 or Key 2 field.
- 4) Turn the SMALL Knob to highlight one of the following function: (PILOT PTT, PILOT ISOLATION, MUSIC ON/OFF, USER LIST, or TUNE EMERGENCY).



**NOTE**: Both softkeys cannot select the same function (except Disabled).

- **5)** Press the BACK Softkey to exit the Softkey Setup menu.
- **6)** Power off the unit and back on to save the softkey settings.



# **TROUBLESHOOTING**

| Problem                   | Possible Cause                                       | Action  |
|---------------------------|--|---|
| GTR 200 does not power on | No power to the<br>GTR 200                           | Check power connections, breakers, and main avionics switch                                 |
|                           | Faulty electrical wiring or connection               | Perform electrical system test  |
| GTR 200 does not transmit | No power to COM                                      | Check power connections   |
|                           | Mic key connection                                   | Check Mic key input connection  |
| Intercom doesn't function | It can be enabled or disabled via configuration mode | Check connections. Refer to the installation manual for wiring and headset test procedures. |
|                           | No voice activation,<br>or if must talk too<br>loud  | Check ICS SQ and ICS<br>VOL levels on the menu<br>page                                      |

### **MESSAGES**

When a Message has been issued by the unit, the Message will be shown on the display. Messages are provided as an aid in troubleshooting the radio functions.

| Message                | Description   | Action   |
|------------------------|---|--|
| VOLUME KEY IS<br>STUCK | The key has been in the pressed position for at least 30 seconds. This key will now be ignored. | Contact Garmin for service if this message persists. |
| SOFTKEY #1 IS<br>STUCK | The key has been in the pressed position for at least 30 seconds. This key will now be ignored. | Contact Garmin for service if this message persists. |



| Message                     | Description  | Action   |
|-----------------------------|--|--|
| SOFTKEY #2 IS<br>STUCK      | The key has been in the pressed position for at least 30 seconds. This key will now be ignored.                      | Contact Garmin for service if this message persists. |
| FREQ SWAP KEY<br>IS STUCK   | The key has been in the pressed position for at least 30 seconds. This key will now be ignored.                      | Contact Garmin for service if this message persists. |
| MENU KEY IS<br>STUCK        | The key has been in the pressed position for at least 30 seconds. This key will now be ignored.                      | Contact Garmin for service if this message persists. |
| ROTARY KNOB<br>KEY IS STUCK | The key has been in the pressed position for at least 30 seconds. This key will now be ignored.                      | Contact Garmin for service if this message persists. |
| MON KEY IS<br>STUCK         | The key has been in the pressed position for at least 30 seconds. This key will now be ignored.                      | Contact Garmin for service if this message persists. |
| MULTIPLE KEYS<br>STUCK      | Multiple keys have<br>been in the pressed<br>position for at least 30<br>seconds. These keys will<br>now be ignored. | Contact Garmin for service if this message persists. |



| Message                            | Description  | Action   |
|------------------------------------|--|--|
| PILOT PTT KEY<br>STUCK             | The Pilot Push To Talk key/switch has been in the pressed position for at least 35 seconds. This key will now be ignored.                  | Verify Push To Talk key/switch is<br>not stuck. Refer to the installation<br>manual for installation wiring<br>tests. Contact Garmin for service if<br>this message persists.    |
| COPILOT PTT<br>KEY STUCK           | The Copilot Push To<br>Talk key/switch has<br>been in the pressed<br>position for at least 35<br>seconds. This key will<br>now be ignored. | Verify Push To Talk key/switch is<br>not stuck. Refer to the installation<br>manual for installation wiring<br>tests. Contact Garmin for service if<br>this message persists.    |
| BOTH PTT KEY<br>STUCK              | Both Push To Talk key/<br>switches have been in<br>the pressed position<br>for at least 35 seconds.<br>These keys will now be<br>ignored.  | Verify Push To Talk key/switches<br>are not stuck. Refer to the<br>installation manual for installation<br>wiring tests. Contact Garmin for<br>service if this message persists. |
| TX HARDWARE<br>FAULT               | An internal hardware problem is preventing COM transmission.   | Contact Garmin for service if this message persists.   |
| REDUCED TX<br>POWER - LOW<br>VOLTS | Transmit power reduced because input voltage is too low.   | Verify input voltage meets<br>minimum requirement identified<br>in installation manual. Contact<br>Garmin for service if message<br>persists.                                    |
| REDUCED TX<br>POWER - HI<br>TEMP   | Transmit power reduced because internal temperature is too high.   | Wait for unit to cool. Add supplemental cooling if problem persists.   |
| INPUT VOLTAGE<br>TOO LOW           | Transmit disabled because input voltage is too low.  | Verify input voltage meets<br>minimum requirement identified<br>in installation manual. Contact<br>Garmin for service if message<br>persists.                                    |



If efforts to resolve the problem fail, Garmin customer service staff will gladly assist you.

Please have the following information ready:

- System configuration (products, antennas, mounting locations, etc.)
- Model No., part number, and serial number
- Software versions
- Description of the problem
- Efforts made to isolate/solve the problem

The Garmin Product Support department may be reached Monday through Friday, 7:00 AM to 7:00 PM Central Time.

US: 913-397-8200

US Toll Free: 1-866-739-5687 Canada Toll Free: 1-866-429-9296 e-mail: aviation.support@garmin.com.

http://www.garmin.com

https://fly.garmin.com/fly-garmin

Garmin International, Inc.
Aviation Products Customer Service Department
1200 East 151st Street
Olathe, KS 66062-3426 USA





Garmin International, Inc. 1200 East 151st Street Olathe, KS 66062, U.S.A. Toll free: 800.800.1020 or 866.739.5687 p: 913.397.8200 f: 913.397.8282

Garmin AT, Inc. 2345 Turner Road SE Salem, OR 97302, U.S.A. Toll free: 800.525.6726 p: 503.391.3411 f: 503.364.2138

Garmin (Europe) Ltd Liberty House, Bulls Copse Road Hounsdown Business Park Southampton, SO40 9RB, U.K. Toll free (within U.K.) 0808.2380000 p: 44/0870.8501241 f: 44/0870.8501251

> Garmin Corporation No. 68, Jangshu 2nd Road Shijr, Taipei County, Taiwan p: 886/2.2642.9199 f: 886/2.2642.9099

> > www.garmin.com